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Guided By

**PROF. RAJESH
KUMAR**

SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA

Project Title

DESIGN AND ANALYSIS OF MANDREL USE IN COLD PILGER MILL

Abstract:

Cold pilgering process is a complex tube making process in which both diameter and thickness of the tube wall are reduced. It is generally chosen for its dimensional accuracy controlled by ratio of diameter to thickness reduction. In pilgering process, the profile of the roller die and mandrel is very important because the outer diameter surface finish depends on the roller die profile and inside diameter surface depends on the mandrel profile. This article focuses on the design and analysis of mandrel using ANSYS software package. We compare the performance of the mandrel made of tool steel grade H11 and M4 taking geometric shapes of parabolic and linear.

Prepared By:

Sr. No.	Student Name	Enrollment No
1	APURV V. PATEL	110780119016
2	DARSHAN B. SUTHAR	120783119001
3	HITESH J. VERMA	120783119003
4	SANDIP R. PATEL	120783119033

